

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,098		03/26/2004	Eduard Kunschir	12684.9USW1	8190
23552	7590	01/24/2006		EXAMINER	
MERCHAN	IT & GO	ULD PC	BUNIN, ANDREW M		
P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				ART UNIT	PAPER NUMBER
MINNEALO	LID, IVIIV	33402-0703		3743	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		$\mathcal{U}$					
·	Application No.	Applicant(s)					
	10/810,098	KUNSCHIR, EDUARD					
Office Action Summary	Examiner	Art Unit					
	Andrew M. Bunin	3743					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 10 Ja	Responsive to communication(s) filed on 10 January 2006.						
• —	This action is FINAL. 2b) This action is non-final.						
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) ⊠ Claim(s) 2-7 and 15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) 2-7 and 15 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>26 March 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate Patent Application (PTO-152)					

Art Unit: 3743

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15 and 2-5 are rejected under 35 U.S.C. 102(b) as being unpatentable by Robertson et al. (US 5,487,378). Robertson et al. disclose a device for inhalation therapy comprising an oscillatable membrane 50 for nebulising a liquid. A membrane can be defined as a "thin sheet of natural or synthetic material that is permeable to substances in solution" (<a href="www.dictionary.com">www.dictionary.com</a>). Therefore, the nozzle array as shown in Figure 5a and 5b can be considered a membrane. In addition, Robertson et al. states the common use of a membrane, "housing comprising a perforate membrane which defines a front wall of the chamber and which has a rear face contacted by liquid in use" (column 2, lines 34-35).

Robertson et al. continues to disclose an oscillation-generating device 84 having at least one connecting means. The connecting means (1)/62 receives an oscillation control signal for oscillating the membrane 50 when the oscillation control signal is received such that a liquid 16/220 disposed on one side of the membrane is nebulised through the membrane 50 and is present on the other side of the membrane 50 as an aerosol as shown in Figure 4a. Robertson et al. states that an "apparatus further comprising vibrating means connected to the housing and operable to vibrate the

Art Unit: 3743

perforate membrane to dispense droplets of liquid through the perforate membrane" (column 2, 36-40).

The device of Robertson et al. also disclose a control means 206 from which an oscillation control signal is supplied to the at least one connecting means (1) of the oscillation-generating device 210 so that said oscillation-generating device 210 oscillates the membrane 50 as shown in Figure 1 below. In Figure 10, Robertson et al. uses a function block diagram to further illustrate the electronic metered dose aerosol delivery system. Figure 10 includes a control means 162 that supplies a further control signal to the oscillation-generating device 170 causing the membrane 50 to oscillate in the audible frequency range so as to emit an audible signal 160 for a user.

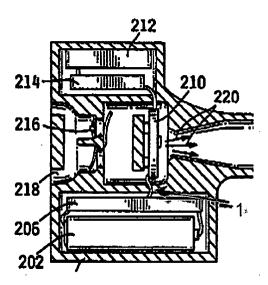


Figure 1: US 5487378

Robertson et al. also disclose a device for inhalation therapy with a further control signal supplied to the oscillation-generating device 170/210 via the same connecting means as the oscillation control signal 174 as shown in Figure 10 and Figure 1 above.

Art Unit: 3743

As for claims 3-5, the oscillation-generating device comprises an electromechanical transducer unit 56 in particular a piezoelectric material. Robertson et al. continues to disclose a support unit 52 to which the electromechanical transducer unit and the membrane 50 are attached. Robertson et al. states, "a piezo-electric transducer is secured to the vibrating member for inducing a rearward displacement...to discharge a small quantity of liquid through the nozzle opening" (column 2, lines 10-13). Robertson et al. disclose a device for inhalation therapy including a generator unit 92 that generates a further control signal, which is supplied to the oscillation-generating device 84, via at least one connecting means as shown in figure 6a.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al. Robertson et al. has discloses the claimed invention except for the generator unit 92 being integrated in the control means 206 and the energy supply means 202 for the inhalation device being integrated in the control means 206. It would have been obvious to one having ordinary skill in the art at the time the invention was made to integrate the generator unit and energy supply means in the control means, since it has been held that forming in one piece an article which has formerly been

Art Unit: 3743

formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 US 164 (1893)

### Response to Arguments

Applicant's arguments (see page 6, lines 1-8), filed 1/10/06, with respect to the rejection(s) of claim(s) 1-7 under 112 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Robertson et al. (US 5487378)

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 6402046, US 5261601, US 6152130, and US 4300131

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3743

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Bunin whose telephone number is (571)272-4801. The examiner can normally be reached on Monday - Friday, 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (571)272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMB 1/21/06 Help Zennett
corvis fill Fetent Examiner